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10/664,893

09/22/2003

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4265

7590 12/28/2007  
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EXAMINER

PRITCHETT, JOSHUA L

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/664,893

Applicant(s)

HERMANN ET AL.

Examiner

Joshua L. Pritchett

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 35-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-46 and 48-54 is/are rejected.
- 7) ☒ Claim(s) 47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This action is in response to Request for Continued Examination filed October 30, 2007 and Amendment filed September 28, 2007. Claims 15-34 were cancelled and claims 35-54 were added as requested by applicant.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-42, 45, 46, 48-50 and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spink (US 6,661,572).

Regarding claims 35, 49 and 52-54, Spink discloses a microscopy system for observing an object positionable in an object plane (Fig. 1) comprising: at least one objective lens (10) arrangement for receiving an object side beam emanating from the object plane and for transforming the object side beam into an image side beam (Fig. 1); plural ocular systems (20a-b, 21a-b) arranged to enable each of the plural observers to observe the object by looking into a respective one of the plural ocular systems (Figs. 5-7), wherein each ocular system comprises at

least one ocular tube (Figs. 5-7) having at least one ocular for generating an image of the object plane from the image side beam, wherein each of the plural ocular systems further comprises at least one image projector (16) having a display for superimposing an image displayed by the display with the beam path of the ocular system such that the image of the object plane is perceived by the observer in superposition with the image of the display (col. 7 lines 10-21), and wherein at least one optical setting of a first ocular system of the plural ocular systems is adjustable independently of a corresponding optical setting of a second ocular system of the plural optical system (col. 7 lines 33-43; 17a-b, 18a-b); a controller (30-32) for generating the image displayed by the display of the first ocular system, wherein the controller is configured to generate the displayed image from a first input image based on the at least one optical setting of the first ocular system and a second image based on the optical setting of the second ocular system (col. 9 lines 49-53). Spink further discloses the controller is configured to generate the displayed image from a second input image independently of the at least one optical setting, wherein the second input image is superimposed with the first input image. Controller (32) of Spink controls the prisms (12a and 12b) that allow the superimposed image viewed independently of the shutter controlled by controller (30). Spink further discloses the second input image is superimposed on the first input image (col. 7 lines 17-19). Spink lacks reference to the use of a second display distinct from the first display. It would have been obvious to one having ordinary skill in the art at the time the invention was made to duplicate the display element (16), since it have been held that a mere duplication of working parts of a device involves only routine skill in the art. One would have been motivated to duplicate the display for the purpose of allowing both viewers to view the additional information provided by the display

element. It is common for two surgeons to operate on a patient at the same time and it may be necessary on occasion for the additional information provided via display 16 to be viewable by both simultaneously for the increased safety of the patient.

Regarding claims 36, 41 and 46, Spink teaches the invention as claimed but lacks reference to a second display and superimposing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to duplicate the first display and superimposing to create a second since it have been held that a mere duplication of working parts of a device involves only routine skill in the art. One would have been motivated to duplicate the display and superimposing for the purpose of allowing two observers to view similar images of the object.

Regarding claim 37, Spink discloses the first ocular system comprises a first camera (13a) and the second ocular system comprises a second camera (13b) and wherein the controller is configured to determine the at least one optical setting based on the comparison of an image detected by the first camera with an image detected by the second camera. Controller (30) of Spink will determine the shutter location based on the superimposition of the image (col. 9 lines 49-53).

Regarding claims 38 and 50, Spink discloses the objective lens arrangement comprises an optical axis, wherein the ocular tube of the first ocular system is rotatable about the objective lens arrangement and the optical axis, wherein the at least one optical setting comprise a rotational position of the controller is configured to generate the displayed image from the first input image by rotating the first input image about an image rotation angle determined in dependence of the rotational position of the ocular tube (Figs. 5-7). Figs. 5-7 show that the

ocular systems are rotatable about the objective lens. Controller (32) of Spink is also capable of rotating the displayed image (col. 9 lines 49-53).

Regarding claim 39, Spink teaches the invention as claimed but lacks specific reference to the detection of the angle between the ocular tube and the objective lens arrangement. Spink teaches that the controller (32) detects the position of the prisms and rotation of the prisms used to convey the image side beam to the ocular tube. One of ordinary skill in the art would find it obvious to have the controller also detect the angle between the objective lens and the ocular tube for the purpose rotating the prisms to the proper angle to allow the observe to see the image. Official Notice is taken. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Spink invention include the detection of the angle between the ocular tube and the objective lens as is known in the art for the purpose of allowing the observer to view the image of the object.

Regarding claims 40 and 45, Spink teaches the invention as claimed but lacks reference to comparing the images of the two cameras. Spink teaches two cameras (13a-b) and the controller (32) detecting the position of the prisms and rotation of the prisms used to convey the image side beam to the ocular tube. One of ordinary skill in the art would find it obvious to compare the images of the two cameras to determine the angle of rotation of the ocular tube to the objective lens. Official Notice is taken. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Spink invention include the detection of the rotation angle as is known in the art for the purpose of properly rotating the prisms to convey the image side beam to the ocular tube thus allowing the observer to view the image of the object.

Regarding claim 42, Spink discloses the second ocular tube is rotatable about the optical axis (Figs. 5-7); the optical setting of the second ocular system comprises a rotation position (col. 7 lines 14-16) and the controller is configured to generate the image displayed by the second ocular system by rotating the first input image by a second rotation angle (col. 7 lines 17-19)

Regarding claim 48, Spink discloses the plural ocular systems is a binocular system (Figs. 1 and 5-7).

Claims 43, 44 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spink (US 6,661,572) in view of Hoppl (US 5,002,376).

Spink teaches the invention as claimed including first and second cameras (13a-b) but lacks reference to the magnification of the plural ocular systems being independently adjustable. Hoppl teaches the magnification of two separate ocular systems are independently adjustable (abstract). Hoppl teaches a means for detecting the setting of the zoom components with respect to one another (col. 4 lines 19-60). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Spink invention include the independently adjustable ocular magnification of Hoppl for the purpose of allowing the two observers to view two different images of the same object simultaneously.

***Allowable Subject Matter***

Claim 47 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to teach or suggest the controller scaling the first input image with a second scale factor determined in dependence of the magnification of the image generated by the second ocular system.

### ***Response to Arguments***

Applicant's arguments filed September 28, 2007 have been fully considered but they are not persuasive.

Applicant argued Spink failed to teach the handling of generation of the first and second displays are different. The claim requires only that the first and second displays are "independent" not "different." Therefore this argument is not persuasive.

Applicant argued Spink fails to teach distinguishing between the first and second input images. The distinguishing between the first and second input images is done by the superpositioning of the images.

Applicant argues Spink fails to teach or suggest the optical setting based on the superimposition of the image. The examiner does not see this limitation in the claim language; therefore this argument is not persuasive. The applicant is also reminded that an apparatus claim must overcome the prior art based on structural limitations (MPE 2114).

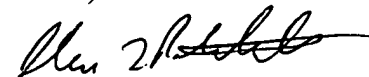


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L. Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Joshua L Pritchett  
Primary Examiner  
Art Unit 2872